

motion (ROM) and function at first month, according with the Knee System Score. Mean values, standard deviation, frequencies and ANOVA tests for quantitative and chi-squared for qualitative variables were calculated, by using a licensed SPSS package. **RESULTS:** There were no differences in epidemiologic data between groups. In group A, the total mean cost of TKA was 5.390€. The length of stay was 3.32 days, pain at first month 37.8 points; ROM 84.32° and function 33.22 points. In group B, total costs turned out to be 5.557€. The length of stay was 3.42 days, postoperative pain 41.97 points; ROM 89.08° and function 33.33 points. A cost-effectiveness ratio calculated for ability to walk and pain slightly favoured group B (186.45 and 180.07 vs. 191.38 and 205.88, respectively). **CONCLUSION:** Despite the theoretical advantages of a knee system design combined with an additional reinforcement of the anaesthetic procedure, only a slight improvement in cost-effectiveness in terms of pain and function at first postoperative month is evidenced.

PAR7

COST EFFECTIVENESS OF AUTOANTIBODIES AGAINST CYCLIC CITRULLINATED PEPTIDE IN THE VERY EARLY DIAGNOSIS OF RHEUMATOID ARTHRITIS

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OBJECTIVES: The aim of this study was to estimate the incremental cost-effectiveness ratio (ICER) of the use of antibodies against cyclic citrullinated peptides (aCCP) in the very early diagnosis of rheumatoid arthritis (RA). **METHODS:** Using a decision analytic model and a published Markov model the 10 year progression of RA in patients first diagnosed as undifferentiated arthritis (UA) was modelled. Based on this model incremental costs and QALYs of using aCCP additionally to ACR criteria for diagnosing RA early were estimated. The effect of delayed diagnosis and treatment due to the non-use of aCCP was modelled as increased progression of the health assessment questionnaire (HAQ). For calculating QALYs, utilities were assigned to HAQ-states. Uncertainty was analysed by univariate and probabilistic sensitivity analyses (Monte-Carlo-Simulation). **RESULTS:** Baseline ICER was 930 Euro/QALY. Univariate sensitivity analyses identified the effect of later diagnosis on HAQ progression as major source of uncertainty resulting in an ICER range from “dominance” to 153,092 Euro/QALY, whereas maximum ICER was 4870 Euro/QALY for all other variables. Monte Carlo simulation resulted in a 95%-uncertainty interval from -3537 Euro/QALY to 5429 Euro/QALY. When indirect costs were considered, baseline ICER was -49.970 Euro/QALY and Monte Carlo simulation resulted in a 95%-uncertainty interval from -78,115 Euro/QALY to -23,444 Euro/QALY. **CONCLUSION:** Compared to the use of ACR-criteria alone, the additional use of aCCP in the very early diagnosis of RA in patients diagnosed as UA is likely to be a cost-effective strategy. In particular when indirect costs are considered, the use of aCCP seems to be a cost saver from a societal perspective. Nevertheless there is a clear need for more research relating to the protective effects of an early or very early diagnosis and treatment of RA on the long-term progression of RA and resulting functional impairment as measured by the HAQ.

PAR8

LEFLUNOMID VERSUS CYCLOSPORIN IN METHOTREXATE-RESISTANT RHEUMATOID ARTHRITIS IN POLAND: A COST-EFFECTIVENESS ANALYSIS

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OBJECTIVES: To assess the cost-effectiveness of leflunomide monotherapy versus cyclosporin monotherapy in methotrexate-resistant rheumatoid arthritis from the perspective of National Health Fund in Poland. **METHODS:** A decision analytic model, based on framework proposed by Kavanaugh was developed. A systematic review was conducted to collect clinical efficacy data. Indirect comparison with placebo as a common comparator was performed. Direct medical costs including costs of drugs, therapy monitoring, adverse reactions treatment, hospitalizations due to progression of arthritis were analyzed. Because of short, 6-months time horizon, discounting was not performed (values in Polish zloty (PLN): 1 Euro = 3.8 PLN). Univariate sensitivity analysis was conducted for key clinical and cost variables. **RESULTS:** Leflunomide and cyclosporin based strategies resulted in 0.449 ACR20 and 0.323 ACR20 response, with corresponding costs of 2740 PLN and 2730 PLN, respectively (cost-effectiveness ratios were 6106 PLN/ACR20 and 8453 PLN/ACR20, respectively). Switching from cyclosporin to leflunomide based therapy resulted in additional ACR20 response gain for the price of 81 PLN. One-way sensitivity analysis revealed that clinical efficacy reduction of 25% for leflunomide and increase of 25% for cyclosporin resulted in incremental cost-effectiveness ratio rise to 3548 PLN/ACR20 and 6106 PLN/ACR20, respectively. **CONCLUSION:** In case of methotrexate resistance, leflunomide monotherapy is more cost-effective than cyclosporin monotherapy from the perspective of Polish National Health Fund.

PAR9

A SYSTEMATIC REVIEW OF COST-EFFECTIVENESS ANALYSES OF BIOLOGICAL DMARDS IN RHEUMATOID ARTHRITIS

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OBJECTIVES: To systematically review the current cost-effectiveness literature of biological disease-modifying antirheumatic drugs (bDMARDs) in rheumatoid arthritis and to explore reasons for differences in results. **METHODS:** Medline, Embase, BIOSIS, Derwent Drug File, Cochrane library and NHS-EED were searched on 12th March 2007 for studies published from 2002–2007. Full economic analyses of bDMARDs were included after a two-stage review process. Bibliographies of included studies were searched for additional citations. **RESULTS:** Nine hundred and nine unique citations were retrieved, and 18 studies met our criteria. Six analyses were carried out in the UK, 5 in the US, 4 in Sweden, 2 in Canada and 1 in The Netherlands and Japan. One of the 18 studies included both UK and Swedish analyses. Nine studies assessed the cost-effectiveness of at least 2 bDMARDs, including etanercept, infliximab, adalimumab and anakinra; while the other 9 compared a single bDMARD with standard DMARDs (e.g. methotrexate, MTX). Three studies compared the cost-effectiveness of infliximab plus MTX versus MTX alone, and 6 estimated the cost-effectiveness of etanercept compared with standard DMARDs. Decision modelling was used in 16 studies. The 3 analyses that compared infliximab plus MTX with MTX alone (2 based on the same decision model)